

### Addressing Equity and Poverty Concerns in Payments for Environmental Services

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*The use of a hydropower reservoir as a fish farming area. Photo: Michael Kollmair.*

#### Introduction

The success of achieving the social goals of Payments for Environmental Services (PES) programmes, i.e. reduction of poverty, depends directly on the equitable distribution of benefits to poor mountain communities, who are the primary custodians and managers of environmental services. Although PES programmes are not designed for poverty reduction, they can create substantial synergies when programme design is well thought through. Recent literature indicates that in general PES programmes are not very sensitive to equity issues and are governed in such a way that may even exacerbate existing inequalities and trigger social tensions (Karr 2002; Miranda et al. 2003). It is therefore important to investigate the governance and equity aspects of PES, which are critical for sustainable development and environmental conservation (WCED 1987).

Equity in PES can be understood from three perspectives: equity in access, equity in decision-making and equity in outcome (Corbera et al. 2007). Equity in access refers to the governance mechanism which determines an individual participant's access to environmental resources, including land and forest. Equity in decision-making refers to the procedural fairness of the PES framework, which ensures that all sections of the community have an equal voice in decision making processes. Equity in outcomes refers to the distribution of cash and in-kind benefits across participants. In view of this, this paper briefly examines the challenges of governance mechanisms of PES in relation to poverty and equity.

#### Challenges to developing pro-poor PES programmes

Despite the theoretical potential for PES to benefit the rural poor, many programmes present serious obstacles to the inclusion of poor households. As most environmental services are land-based, a growing body of literature suggests that the governance mechanisms of the majority of PES schemes favour larger and wealthier landowners and provide little benefit to poor and landless people. A study in one Costa

Rican PES programme, for instance, found that about two thirds of the participants were large landholders who had more than 80 ha land, and only one third small landholders who had less than 10 ha (Miranda et al. 2003). Similarly, Landell-Mills and Porras (2002) state that PES programmes can increase incentives for powerful groups to take control of additional land resources, particularly when land tenure is insecure, thereby aggravating inequality. In this way, the livelihoods of the landless poor, women, and herders, many of whom depend on gathering non-timber products from forests, might also be affected if PES conditions limit their access to forested land (Kerr 2002).

In cases where environmental stewards or users are excluded from access to forest resources (e.g. ban of grazing or non-timber forest product use) they have to be compensated to a degree that they are not worse off than before. Property rights as well as access and tenure issues are at the core of such problems, and must be considered in the design of equitable compensation schemes. Agricultural wage labourers are also likely to lose out from land diversion programmes with extensification components, which reduce labour demand and wages (Zilberman et al. 2008).

As PES is basically a market-based approach, it needs special attention to make it work for the poor. A few key challenges are briefly summarised below:

- Identifying providers of environmental services. As most of the environmental services are land based, there is the danger of being land-owner biased in shaping compensation schemes. The poor depend often on the use of public or community land, but contribute considerably to environmental services.
- Tenure security. In many parts of the world, including the Hindu Kush Himalaya (HKH) region, many indigenous peoples and ethnic minorities have traditionally no individual property rights to land, water, and forest resources. However, payment is generally determined based on land ownership. The challenge is to develop policy options to provide equitable rewards in cases where property rights are not secured.
- High opportunity costs of participation. Compliance in PES schemes sometimes requires participants to restrain from other economic activities such as grazing, fodder fuelwood collection, tillage practices and other traditional resource uses. Due to lack of alternative livelihood options, poor families cannot afford to participate in PES programmes as they cannot give up traditional economic activities.
- High transaction costs. PES schemes demand community meetings, negotiation of contracts, contributions to baselines and monitoring studies from the local people. These transaction costs can become a considerable burden on poor families and they may opt to be excluded from the scheme.
- Lack of credit, start-up funds, and other support services. In order to comply with the requirements of PES programmes, land users often have to change farming and other land-use practices, requiring significant investments or bridging funds for foregone yields, new material, training, and lost income during the transition period. Covering these costs is particularly difficult for poor families, who typically lack credit and cash savings.

## Options for improving equity and governance

Despite these challenges, there is considerable hope that PES programmes can be made more pro-poor through designing appropriate institutional mechanisms, thereby ensuring equitable, efficient and sustainable functioning. Policies relating to PES are emerging in some countries to address the ongoing challenges and issues.

Though cash contribution might be low, PES can provide poor and/or marginalised upland communities with a platform to organise themselves in a way that enhances social capital and amplifies the call for access to resources, better justice and equity. Compared to command and control policies for environmental conservation such as establishing reserve forest, national parks, banning timber and non-timber forest products collection, PES can be more inclusive. An additional potential advantage of PES schemes is in providing relatively stable income relative to other sources that may allow smaller farms, more vulnerable to risk, to receive benefits.

Institutional arrangements can be developed to improve the provision of poor people's access to resources, access to participation and access to the rewards of PES programmes. Because of high diversity of social and ecological systems, it is not possible to identify a single institutional design which will work best in all circumstances. Attention should therefore be paid to designing institutional mechanisms in such a way that the poor can participate and influence the decision making process as well as outcomes.

Property rights significantly influence the design and performance of PES. Policy options can be developed to provide appropriate property rights to people who are using and managing such resources. Until secured property rights are granted by the national government, institutional innovation can provide usufruct benefits to participants. In order to reduce the high transaction cost, provision may be made to allow groups of small farmers to collectively join the PES programme. Reliable intermediaries can also play a significant role in reducing transaction costs and facilitating designs and negotiations for community-based PES. Options must also be developed to finance upfront start-up costs through microfinance programmes, potentially following the model of the Grameen Bank for financing self-employment.

## Conclusions

Ensuring the flow of environmental services and rewarding the providers of such services are at the core of PES systems. They are not created *per se* to reduce poverty. However, most of the areas providing environmental services are in marginalised regions (many mountainous areas) with widespread poverty. Without including poverty sensitive aspects in PES schemes there is a great danger of challenging the long-term environmental benefits. Equity between and within societies is a central pillar of sustainable development. Tools to ensure pro-poor outcomes include: ensuring equitable access to land, ensuring land tenure systems, devising special support to the poor to participate in the schemes and linking PES more effectively to the benefits of other development programmes.

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*Example of an agroforestry system, fodder and cardamom. Photo: Elisabeth Kerkhoff.*